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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/991,589	11/16/2001	Barry Wendt	S30.12-0004	3584

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Christopher L. Holt  
WESTMAN CHAMPLIN & KELLY  
Suite 1600 - International Centre  
900 Sout Second Avenue  
Minneapolis, MN 55402-3312

EXAMINER

CHOOBIN, BARRY

ART UNIT	PAPER NUMBER
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2625

DATE MAILED: 05/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/991,589

**Applicant(s)**

WENDT ET AL

**Examiner**

Barry Choobin

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19-25 and 46-50 is/are allowed.
- 6) ☒ Claim(s) 1-8,26,28 and 29 is/are rejected.
- 7) ☒ Claim(s) 9-18,27,30-45 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3,5,7-10. 6) ☐ Other: .

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on February 14, 2002 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.
2. The information disclosure statement (IDS) submitted on September 30, 2002 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.
3. The information disclosure statement (IDS) submitted on September 2, 2003 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.
4. The information disclosure statement (IDS) submitted on October 27, 2003 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.
5. The information disclosure statement (IDS) submitted on November 20, 2003 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-8, 26,28 and 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Ross (US 6,95447).

As to claim 1, Ross discloses a method for comparing a first image to a second image, the method comprising (column 2, lines 18-34): deriving a first image data set based on the first image and a second image data set based on the second image, wherein the first and second image data sets include a plurality of data elements and are model representations of the first and second images (column 2, lines 18-34); and comparing at least one data element in the first image data set with at least one data element in the second image data set (column 2, lines 24-25).

As to claim 2, Ross discloses narrowing the first and second image data sets by eliminating those data elements in one of the first and second image data sets that do not fit within a predetermined qualifying range of deviation from a data element of a same type in the other of the first and second image data sets (column 2, lines 24-34).

As to claim 3, Ross discloses the method of claim 1 (see claim1), wherein comparing at least one data element in the first image data set with at least one data element in the second image data set comprises: comparing at least one data element of a first type from the first image data set to at least one data element of the first type from the second image data set, the first type being one of a plurality of data element types included in the plurality of data elements (feature vectors).

As to claim 4, Ross disclose the first and second images are fingerprint images and the first type of data element is selected from a group consisting of: bifurcation representations, rod representations, vector segments associated with bifurcation representations, vector segments associated with rod representations, vector segments not associated with bifurcation representations, vector segments not associated with rod representations, microminutia points, and combinations thereof (Fig.1 element 16).

As to claim 5, Ross discloses each data element type has at least one defining characteristic and comparing at least one data element of a first type from the first image data set to at least one data element of the first type from the second image data set comprises: comparing at least one defining Characteristic of at least one data element of the first type from the first image data set to a corresponding at least one defining characteristic of at least one data element of the first type from the second image data set (any of these represents a characteristic comprising ridge endings, ridge bifurcations and ridge count).

As to claim 6, Ross discloses comparing at least one defining characteristic of at least one data element of the first type from the first image data set to a corresponding at least one defining characteristic of at least one data element of the first type from the second image data set comprises: determining an amount of deviation between said at least one defining characteristic of at least one data element of the first type from the first image data set and said corresponding at least one defining characteristic of at

least one data element of the first type from the second image data set (column 2, lines 29-34).

As to claim 7, Ross discloses comprising: predetermining a qualifying range of deviation; and generating a possible match list that indicates data elements from the first and second image data sets wherein the amount of deviation is within the qualifying range of deviation (column 5, lines 27-31).

As to claims 8 and 28, Ross discloses comparing at least one data element in the first image data set with at least one data element in the second image data set comprises: generating a first count of the plurality of data elements in the first image data set that approximately match the plurality of data elements in the second image data set (column 1, line 30 ridge count).

As to claim 29, Ross discloses comprising: selecting from the plurality of other image data sets a predetermined number of image data sets having the most data elements that approximately match data elements taken from the first image data set; and performing a more thorough comparison of the predetermined number of image data sets to the first image data set (column 5, lines 28-38).

#### **Allowable Subject Matter**

Claims 9-18, 27, 30-45 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 19-25 and 46-50 are allowed.

### **Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 5040223 to Kamiya et al.

US 5157482 to Cosgrove.

US 5668874 to Kristol et al.

US 6571014 to Larkin.

US 6118890 to Senior.

US 6134340 to Hsu et al.

US 6314197 to Jain et al.

US 6597802 to Bolle et al.

US 2002/01455050 to Jayaratne.

US 6275601 to Yamaguchi et al.

US 5995640 to Bolle et al.

US 6233348 to Fujii et al.

US 6072895 to Bolle et al.

US 6567765 to Wu et al.

US 2002/0126883 to Senior.

US 5631972 to Ferris et al.

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**CONTACT INFORMATION**

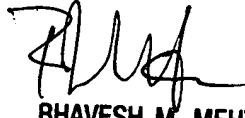
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barry Choobin whose telephone number is 703-306-5787. The examiner can normally be reached on M-F 7:30 AM to 18:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on 703-308-5246. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Barry Choobin

May 20, 2004

  
**BHAVESH M. MEHTA**  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600